

# A5DF-D



D-Class 7-16 DIN Female for 7/8 in AVA5-50 and AVA5-50FX cable

## Product Classification

**Product Type** Wireless and radiating connector

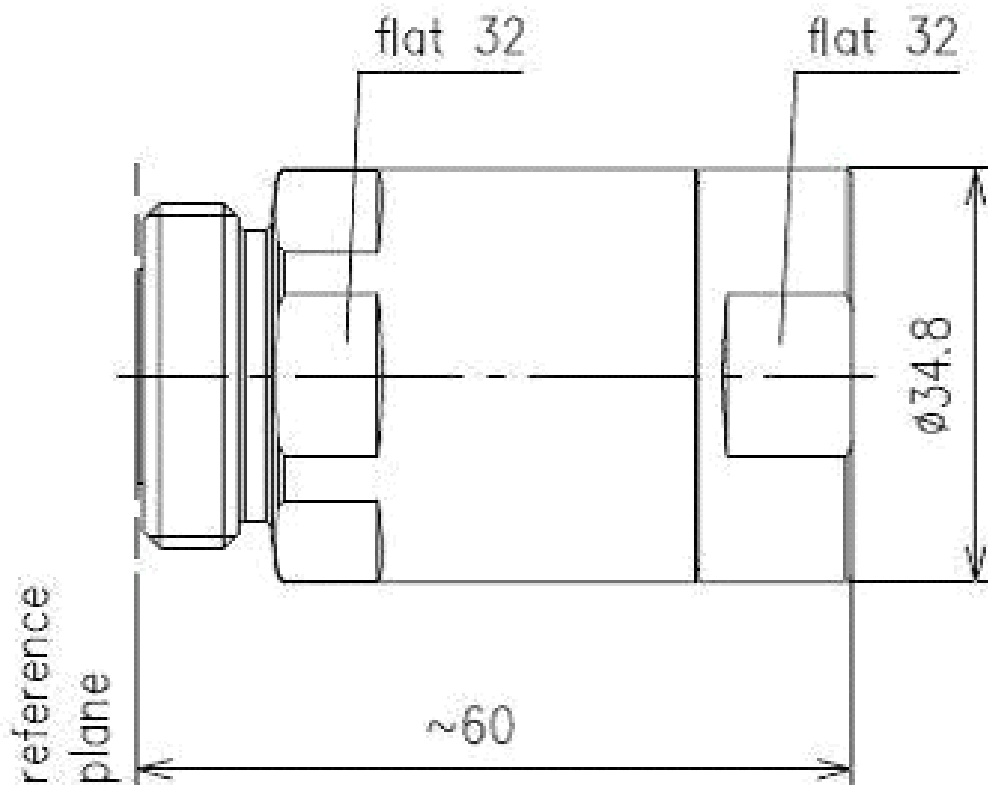
## General Specifications

**Interface** 7-16 DIN Female  
**Body Style** Straight  
**Mounting Angle** Straight  
**Ordering Note** CommScope® standard product (Global)

## Electrical Specifications

**Connector Impedance** 50 ohm  
**Operating Frequency Band** 0 – 3700 MHz  
**Cable Impedance** 50 ohm  
**3rd Order IMD Dynamic Test Method** Two +43 dBm carriers  
**3rd Order IMD, typical** -166 -dBc @ 1800 MHz  
**3rd Order IMD Test Method** Two +43 dBm carriers  
**RF Operating Voltage, maximum (vrms)** 1415.00 V  
**dc Test Voltage** 4000 V  
**Outer Contact Resistance, maximum** 1.50 mOhm  
**Inner Contact Resistance, maximum** 0.40 mOhm  
**Insulation Resistance, minimum** 5000 MOhm  
**Average Power** 3.0 kW @ 900 MHz  
**Peak Power, maximum** 40.00 kW  
**Insertion Loss, typical** 0.05 dB  
**Shielding Effectiveness** -130 dB

## Outline Drawing



## Mechanical Specifications

|  |                        |
|--|------------------------|
| <b>Inner Contact Attachment Method</b>   | Captivated             |
| <b>Outer Contact Plating</b>             | Trimetal               |
| <b>Inner Contact Plating</b>             | Silver                 |
| <b>Attachment Durability</b>             | 25 cycles              |
| <b>Interface Durability</b>              | 50 cycles              |
| <b>Interface Durability Method</b>       | IEC 61169-4:9.5        |
| <b>Connector Retention Tensile Force</b> | 1334 N   300 lbf       |
| <b>Connector Retention Torque</b>        | 8.13 N-m   72.00 in lb |
| <b>Insertion Force</b>                   | 200.17 N   45.00 lbf   |
| <b>Insertion Force Method</b>            | IEC 61169-1:15.2.4     |
| <b>Pressurizable</b>                     | No                     |

## Dimensions

|                     |        |
|---------------------|--------|
| <b>Nominal Size</b> | 7/8 in |
|---------------------|--------|

# A5DF-D

---

|                 |                    |
|-----------------|--------------------|
| <b>Diameter</b> | 34.80 mm   1.37 in |
| <b>Length</b>   | 54.92 mm   2.16 in |
| <b>Weight</b>   | 170.00 g   0.37 lb |

## Environmental Specifications

|  |   |
|--|---|
| <b>Operating Temperature</b>           | -40 °C to +85 °C (-40 °F to +185 °F)                          |
| <b>Storage Temperature</b>             | -55 °C to +85 °C (-67 °F to +185 °F)                          |
| <b>Immersion Depth</b>                 | 1 m   |
| <b>Immersion Test Mating</b>           | Mated   |
| <b>Immersion Test Method</b>           | IEC 60529:2001, IP68  |
| <b>Water Jetting Test Mating</b>       | Mated   |
| <b>Water Jetting Test Method</b>       | IEC 60529:2001, IP66  |
| <b>Moisture Resistance Test Method</b> | MIL-STD-202F, Method 106F                                     |
| <b>Mechanical Shock Test Method</b>    | IEC 60068-2-27  |
| <b>Thermal Shock Test Method</b>       | MIL-STD-202, Method 107, Test Condition A-1, -55 °C to +85 °C |
| <b>Vibration Test Method</b>           | IEC 60068-2-6   |
| <b>Corrosion Test Method</b>           | IEC 60068-2-11  |

## Standard Conditions

|   |                |
|---|----------------|
| <b>Attenuation, Ambient Temperature</b>   | 20 °C   68 °F  |
| <b>Average Power, Ambient Temperature</b> | 40 °C   104 °F |

## Return Loss/VSWR

| <b>Frequency Band</b> | <b>VSWR</b> | <b>Return Loss (dB)</b> |
|-----------------------|-------------|-------------------------|
| 0–1000 MHz            | 1.02        | 40.00                   |
| 1000–2700 MHz         | 1.04        | 34.00                   |
| 2700–3800 MHz         | 1.07        | 30.00                   |

## Regulatory Compliance/Certifications

| <b>Agency</b>              | <b>Classification</b>  |
|----------------------------|--|
| RoHS 2011/65/EU            | Compliant by Exemption   |
| ISO 9001:2015              | Designed, manufactured and/or distributed under this quality management system |
| China RoHS SJ/T 11364-2014 | Below Maximum Concentration Value (MCV)  |



## \* Footnotes

|                        |   |
|------------------------|---|
| <b>Immersion Depth</b> | Immersion at specified depth for 24 hours |
|------------------------|---|

# A5DF-D

---

**Insertion Loss, typical** 0.05v̄freq (GHz) (not applicable for elliptical waveguide)